

### **REMARKS/ARGUMENTS**

Applicants acknowledge with appreciation the withdrawal of claim rejections under 35 U.S.C. § 112, second paragraph, and under 35 U.S.C. § 112, first paragraph (new matter), as set forth in the Office Action (9/29/04, page 2, #4 and #5). Applicants also acknowledge with appreciation the Examiner's discussion with Applicants' representative as indicated herein on November 23, 2004, discussing all of the pending claims and, it is believed, coming to agreement on the amendments and arguments made herein.

Claims 68, 69, 71, and 75-79 were pending in the application. Claims 68 and 71 have been cancelled solely in order to advance prosecution. Claim 69 has been amended to specify that the claims pertain to VSP $\beta$  as set forth in SEQ ID NO:1. Accordingly, claims 75-79 (which are dependent on or incorporate the limitations of claim 69) have also been amended to incorporate this limitation. Support for this limitation can be found in the specification, for example, in Figure 1 and in the Brief Description on page 3, lines 2-4, and in the sequence listing. No new matter has been added by way of amendment. Reexamination and reconsideration of the claims is respectfully requested.

#### **The Rejection of Claims Under 35 U.S.C. § 112, Second Paragraph, Should Be Withdrawn**

The Office Action maintained the rejection of claims 68, 69, 71, and 75-79 under 35 U.S.C. § 112, second paragraph, "as being indefinite for the nature of VSP $\beta$ ..." (Office Action of 9/29/04, page 3, #6). Claims 68 and 71 have been cancelled. Claim 69 has been amended to specify that the claims pertain to VSP $\beta$  as set forth in SEQ ID NO:1. Accordingly, claims 75-79 (which are dependent on or incorporate the limitations of claim 69) have also been amended to incorporate this limitation. Support for this limitation can be found in the specification, for example, in Figure 1 and in the Brief Description on page 3, lines 2-4, and in the sequence listing. No new matter has been added by way of amendment. Moreover, it appears that this limitation has already been considered insofar as the limitation "a *Glycine max* vegetative storage protein  $\beta$ " was added to claim 53 by preliminary amendment filed September 7, 2000, and it is the previously-known amino acid sequence of this protein that is set forth in SEQ ID

NO:1 (see page 3, line 2 of the specification as amended on January 31, 2003). In view of this amendment, Applicants respectfully submit that the rejection of claims 69 and 75-79 as being indefinite has been overcome and should be withdrawn.

Applicants acknowledge that, as mentioned by the Examiner (Office Action of 9/29/04, page 3, #6), claim 69 had been improperly presented in the previous response of July 6, 2004, as being drawn to a method for altering the composition of  $\alpha$  VSP $\beta$  rather than being drawn to a method for altering the composition of VSP $\beta$ , because no such amendment had been made to the claim. Applicants' representative regrets the error and notes that the first line of claim 69 should read, in part, "method for altering the amino acid composition of VSP $\beta$ ..." It is hoped that the marked-up version of claim 69 above properly corrects the error and makes clear that the claim should read, "method for altering the amino acid composition of VSP $\beta$ ..." If this is not the proper procedure for correcting the claim in view of the preceding error, Applicants' representative respectfully requests that the Examiner make the appropriate correction by Examiner's amendment if possible.

The Office Action maintained the rejection of claims 68, 69, 71, and 75-79 under 35 U.S.C. §112, second paragraph, as being indefinite because "it is unclear if such maintenance [of native conformation] is a clear limitation of the claimed methods" (Office Action of 9/29/04, page 3, #7). Claims 68 and 71 have been cancelled in order to advance prosecution. Applicants emphasize that the currently pending claims, as amended, are drawn to a method for altering the amino acid composition of VSP $\beta$  as set forth in SEQ ID NO:1. The method requires the steps of **introducing** amino acid changes into VSP $\beta$  to create an engineered VSP $\beta$  and **assessing** the conformation of said engineered protein based on its ability to bind with a set of antibodies which bind to the native protein. Thus, the method does not require the engineered protein to retain the conformation of the native protein; the method only requires that the conformation be assessed in the specified manner. The native conformation may or may not be retained by the engineered protein; what is important to the claimed invention is the introduction of changes to VSP $\beta$  and the assessment of the conformation of the engineered protein using a set of antibodies.

Appl. No.: 09/478,598  
Amdt. dated 12/23/2004  
Reply to Office action of September 29, 2004

The Rejection of Claims Under 35 U.S.C. § 112, First Paragraph, Should Be Withdrawn

The Office Action (9/29/04, page 4, #8) maintained the rejection of claims 68 and 71 under 35 U.S.C. § 112, first paragraph, for failing to meet the written description requirement. While Applicants disagree with this rejection, claims 68 and 71 have been cancelled in order to advance prosecution. Accordingly, this rejection has been obviated by amendment and should be withdrawn.

CONCLUSION

In view of the above amendments and remarks, Applicants submit that the rejections of the claims under 35 U.S.C. §§112, first and second paragraphs, are overcome. Applicants respectfully submit that this application is now in condition for allowance. Early notice to this effect is solicited.

If in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject Application, the Examiner is invited to call the undersigned.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required

Appl. No.: 09/478,598  
Amdt. dated 12/23/2004  
Reply to Office action of September 29, 2004

therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

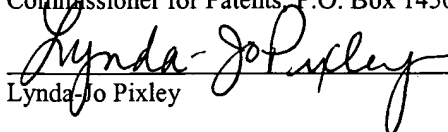


Leigh W. Thorne  
Registration No. 47,992

**Customer No. 29122**  
**ALSTON & BIRD LLP**  
Bank of America Plaza  
101 South Tryon Street, Suite 4000  
Charlotte, NC 28280-4000  
Tel Raleigh Office (919) 862-2200  
Fax Raleigh Office (919) 862-2260

"Express Mail" mailing label number EV 387068894 US  
Date of Deposit December 23, 2004

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

  
Lynda Jo Pixley

RTA01/2169466v1